

Dr Graeme A Flynn

PhD, M.Eng Director

Profile

Graeme is the founder of Urban Microclimate Ltd. He specialises in design consultation and environmental impact assessment for wind effects and natural lighting. This includes pedestrian level wind microclimate, wind loading, natural ventilation, and daylight and sunlight amenity.

Graeme has more than 25 years' experience in aerodynamics and wind engineering, spanning the construction and aerospace industries. Prior to founding Urban Microclimate Ltd. in 2014, he was Director of Microclimate at a large multidisciplinary consultancy. Before this he spent over 10 years with a leading international wind consultancy, heading the company's wind microclimate and stadia group and latterly taking over responsibility for daylight and sunlight services. This work included technical lead and PM for wind tunnel testing, numerical modelling and desk-top studies on stadia, tall buildings, building complexes and masterplans. Projects covered the UK, Europe, the Middle East, the US, South America and Asia, from initial design development through the planning process to detailed design, and included expert application of national Standards and compliance with best UK and international practice.

Key Experience

- Environmental Impact Assessment
- Wind climate analysis
- Wind tunnel testing
- Computational Fluid Dynamics
- Desk-top analysis / Codes of practice
- Daylight / sunlight assessment
- Project management
- Quality assurance
- Expert witness
- Stakeholder consultation
- Peer review

Selected Project Experience

Arena Point

Provided specialist advice during the design development stages, helping reduce the mitigation requirements. Then led detailed wind microclimate studies to optimise the wind mitigation measures and support the planning application for this high-rise student residence in Leeds.

Arundel Place

Led daylight / sunlight studies to support the planning application for this residential development in London.

Cherry Park

Led wind microclimate studies and daylight / sunlight modelling studies forming part of the EIA to support the revised outline application for this dense residential development in London. Subsequently provided specialist consultation during the detailed design phase to optimise the natural lighting and minimise wind mitigation requirements, culminating in reports to support the reserved matters application.

Montgomery's Wharf

Carried out a two-phase wind microclimate desk study to develop the landscaping strategy in response to potential wind effects and support the planning application for this residential development in London.

St Johns

Led wind microclimate studies, forming part of the EIA, to support the initial outline application for this masterplan in Manchester. Subsequently provided support on a series of NMA, RMA and new detailed applications, including further development and optimisation of mitigation measures.

Sheepscar Grove

Led combined wind microclimate desk study and CFD modelling study to support the planning application for this student residence in Leeds. Specialist expertise was applied to streamline the scope of the assessment, to provide a proportionate assessment whilst observing Leeds' wind microclimate guidelines.

Southern House

Carried out a preliminary, high-level, wind microclimate desk study to highlight potential effects and mitigation requirements, to support the pre-app process for this tall building proposal in London.

Winstanley & York Road Estate

Led wind microclimate studies, forming part of the EIA, to support the design development and hybrid planning application for this large and sensitive masterplan in London.

Selected UK Projects List

Buildings

- Airport City North E1-E3, Manchester
- Airport City North THG, Manchester
- Alliance Park, London
- Anchor Wharf, London
- Angel Lane, London
- Arena Point, Leeds
- Arundel Place, London
- Arundel Street, Manchester
- Avonmouth House, London
- Axion House, London
- One Axis Square, Birmingham
- Four Axis Square, Birmingham
- Battersea Park Road, London
- Bendix Street, Manchester
- Botanical Gardens, Manchester
- Brent Cottage, London
- Brent Cross Thameslink, London
- Brighton Road, London
- Calverley Close, London
- Canterbury Road, London
- Capital Interchange Way, London
- Chailey Industrial Estate, London
- Chapel Street, Manchester
- Charles Street, Manchester
- Cheshunt Lakeside, Broxbourne
- Christie Road, Manchester
- Cockfoster Station, London
- Colindale Gardens, London
- Cornbrook Hub, Manchester
- · Cromwell Road, London
- Dakota Hotel, Manchester
- Durning Hall, London
- Eagle Star House, Newcastle
- East Quayside, Newcastle
- Eastern Avenue, London
- Eider House, Manchester
- Elizabeth House, Woking
- Ellesmere Street, Manchester
- Erie Basin, Manchester
- Excelsior Mill, Manchester
- First Street South, Manchester
- Forth Banks, Newcastle
- Foxley Lane, London
- Foxley Road, London
- Frederick House, York
- Gallions View, London
- Great Jackson Street, Manchester
- Green Quarter Block 7, Manchester
- Greenwich Creekside, London
- Greenwich Design District, London
- Greenwich Peninsula 18.02, London
- Greenwich Peninsula 18.03, London
- Greenwich Peninsula 19.04, London
- Greenwich Peninsula 19.05, London
- Harper Road, London
- Hawks Road Clinic, London
- Hero of Switzerland, London
- High Street Romford, London
- Home Group HQ, Newcastle
- Hotspur Press, Manchester
- Hume House, Leeds

- Islington Wharf Ph.3, Manchester
- Kenavon Drive, Reading
- Landsdowne House, Birmingham
- Lea Bridge Gasholders, London
- LEB Building, London
- · Leven Wharf, London
- Millington Road, London
- Montgomery's Wharf, London
- Neopost House, London
- New Cross, Manchester
- North Woolwich Road, London
- Northolt Retail Park, London
- Old Kent Road, London
- Oldham Road, Manchester
- Park Royal, London
- Peninsula Place, London
- Peninsula Upper Riverside, London
- Piccadilly Hotel, Manchester
- Portugal Street East, Manchester
- Potato Wharf, Manchester
- Pottery Lane, Newcastle
- QMUL School of Business and Management, London
- QMUL Floyer House, London
- QMUL Mile End Residence, London
- Queen's Square, London
- Queens Dock Ph.2, Liverpool
- Redclyffe Road, London
- River Centre, Tonbridge
- River Street, Manchester
- Rochdale Road, Manchester
- Romford Road, London
- Sheepscar Grove, Leeds
- Somerville College, Oxford
- Southern House, London
- St. Georges Court, LondonSt. Georges House East, London
- St. Johns G&S, Manchester
- St. Johns MGY, Manchester
- Statesman House, Maidenhead
- Stratford City M7 Office, London
- Stratford Intl. Way, London
- Strawberry Place, Newcastle
- Thames Road, London
- Thames Side Wharf, London
- The Crescent, Manchester
- The Factory, Manchester
- Tooley Street, London
- Toyoko Inn Hotel, Manchester
- Union T1, Manchester
- Union T2, Manchester
- Unity Square, Nottingham
- Victoria Quarter, London
- Victoria Way, LondonWaterloo Hub, London
- Westfield Ph.2 Blk C, London
- Westfield Ph.2 Blk K, London
- Whitworth Street West, Manchester
- Woden Street, Manchester4 Wych Elm, Harlow
- 5 Wych Elm, Harlow
- 10 Wych Elm, Harlow

Masterplans

- Axis Square, Birmingham
- Barking Riverside, London
- Basildon Town Centre, Essex
- Bath Gasworks, Bath
- Berry Farm, Hampshire
- Borders Lane Park, London
- Cherry Park, London
- Clarendon Gas Works, London
- Edmonton Green, London
- Goods Yard, London
- High Road, London
- Middlesex Business Centre, London
- Monarchs Quay, Liverpool
- Rochester Riverside, Kent
- Rom Valley Way, London
- Shredded Wheat South, Welwyn Garden City
- Silk Park, London
- St. Johns, Manchester
- Trinity Islands, Manchester
- Wheat Quarter, Welwyn Garden City
- Winstanley & York Road Estate, London

Stadia / Arenas

- Americ Community Ctadium Duighton
- Amex Community Stadium, Brighton
- Craven Cottage Stadium, LondonEmirates Stadium, London
- Kirkby Stadium, Liverpool
- New Anfield Stadium, Liverpool
- Old Trafford Stadium, Manchester
- 2012 Olympic Stadium, London
- 2012 Olympic Velodrome, LondonWimbledon Centre Court, London

- EIA / Peer Review
- Albert Embankment, London
- Barnsbury Estate, London
- Brent Cross Cricklewood, London
- Bellamy Cl & Byng St, London
- Chocolate Factory, LondonCrossharbour, London
- Deanston Wharf, London
- East India Dock Road, London
- Ebury Bridge Estate, London
- Fieldgate Street, LondonFossetts Farm, Southend-on-Sea
- Great Eastern Quays, London
- Keybridge House, London
- Kingdom Street, LondonLansdowne Road, London
- Margarine Works, LondonMerchant Square, London
- Naval Row, London
- New Bermondsey, LondonNorth Quay, London
- Skylines Village, London
- Stratford Centre, LondonTottenham Hale Centre, London
- Vauxhall Cross, London
- Wood Wharf, London
- Woolwich Exchange, London

Urban Microclimate Ltd.